What is claimed is:

- !. An expandable hoop support for flexible tubing comprising in combination:
 - a. A preformed hoop composed of a coil of material having memory retaking properties; and
 - b. Cylindrical delivery means for constraining said coil into a linear configuration whereby when said delivery means and said coil are inserted into said tube and said delivery means is then removed, said hoop will then reconfigure from a constrained linear configuration to the original preformed hoop configuration.
- The apparatus of claim 1 wherein said delivery means is a rod arranged to fit within said coil.
- 3. The apparatus of claim 1 wherein said delivery means is a tube arranged to fit over said coil.
- 4. The apparatus of claim 1 wherein said hoop comprises a stent.
- 5. The procedure for opening a coronary artery comprising in combination:
 - a. Providing a preformed hoop composed of a coil of material having memory retaining properties;
 - Providing cylindrical delivery means for constraining said coil into a linear configuration;
 - c. Inserting said hoop and said delivery means into said artery; and
 - d. Removing said delivery means whereby said hoop remains in said artery to support said artery in an open position.

- 6. The procedure of claim 5 wherein said delivery means is a rod arranged to fit within said coil.
- 7. The procedure of claim 5 wherein said delivery means is a tube arranged to fit over said coil.